



Via ECFS

October 29, 2018

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Ex Parte Notice: Broadcasting as Part of the 5G Distribution Ecosystem*

GN Docket No. 16-142, *Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard*
WT Docket No. 17-79, *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*
WC Docket No. 17-84, *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*
GN Docket No. 14-177, *Spectrum Bands above 24 GHz*
AU Docket No. 18-85, *Competitive Bidding Procedures for Auction 101 (28 GHz) and Auction 102 (24 GHz)*
WT Docket No. 18-120, *Transforming the 2.5 GHz Band*
GN Docket No. 17-258, *Promoting Investment in the 3550-3700 MHz Band*
GN Docket No. 18-122, *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*
GN Docket No. 12-268 et al., *Broadcast Incentive Auction dockets*
WT Docket No. 17-200, *Review of the Commission’s Rules Governing the 896-901/935-940 MHz Band*
ET Docket 18-295, *Unlicensed Use of the 6 GHz Band*
ET Docket No. 18-21, *Use of Spectrum Bands Above 95 GHz For Innovative Radio Services*

Dear Ms. Dortch:

On October 25, 2018, the undersigned along with Mark Aitken, President, ONE Media 3.0, LLC, met with the following Commission personnel to discuss the role of broadcasters and broadcasting in the world of 5G distribution using the recently authorized “Next Gen” Broadcast Standard, ATSC 3.0:

- Commissioner Michael O’Reilly
 - Erin McGrath, Legal Advisor to Commissioner O’Reilly for Wireless, Public Safety, International Issues
- Separately with:
- Will Adams, Legal Advisor to Commissioner Carr for Wireless Issues.

The presentations focused on an overview of Next Generation Broadcasting and its capacity to deliver data services – not limited to video – as part of the 5G ecosystem in multiple frequency bands. Included among the points made were the following:

Broadcast-Broadband Convergence. The new ATSC 3.0 “Next Generation,” Internet Protocol (IP)-based broadcast standard has enormous flexibility to provide video and other data services in ways that dwarf the current over-the-air broadcast and 4G distribution platforms. Significantly, it can be used as the baseline for terrestrial broadcasters to provide a new, combined broadcast and broadband, cloud-native network system architecture, delivering television and non-television services to new device types. This novel, cloud-native system architecture will be constructed using the ATSC 3.0 physical layer and a new, virtualized, shared IP Core which represents a true paradigm shift for broadcasters and other wireless providers.

Use cases for these new services include: offloading large data files (including video) needed by carriers to cache programming directly on user devices, dramatically improving efficient distribution of data to autonomous driving vehicles, and facilitating near-instantaneous needs for IoT devices and telemedicine activities.

Mature 5G networks will use a combination of spectrum bands including low, medium and high-band spectrum, which are capable of transmitting significantly more data than 4G, but are limited to much shorter distances. In addition, high-band 5G spectrum has a shorter wavelength than spectrum used for 4G, making it more difficult for these signals to penetrate solid objects such as walls and windows. To overcome the distance and signal penetration challenges, 5G will require vast networks of small-cell sites located on a diverse array of real estate platforms, with the small-cells anchored by larger cell towers. Use of broadcast tall towers and single frequency networks can dramatically ameliorate the challenges of small cell deployment by providing an efficient piece in the distribution chain.

5G Design and ATSC 3.0. The ATSC 3.0 standard was designed to be part of the 5G ecosystem. The migration to cloud-based network system architectures in the wireless industry that was initiated by the Next Generation Mobile Networks (NGMN) Alliance recognizes the need for standardization of both new radio technology and a new system architecture to replace that used in the current broadband LTE standard. As the wireless standard setting organization, 3GPP, commenced its review of the future 5G wireless transmission standard, a clear requirement was to use the proven IT networking paradigms.

Broadcasters using the Next Generation Broadcast Platform (NGBP) will employ the same 3GPP system architecture design principles for innovation in the television broadcast industry. NGBP integrates a new shared virtualized IP core network integrated with a new robust and spectrum efficient broadcast physical layer. This will permit broadcasters to provide efficient services needed as part of a robust 5G distribution chain.

The process of converging broadband and broadcast services using the Next Gen Standard is already part of application discussions in other countries including India and Korea.

As the Commission considers implementation actions to accelerate deployment of 5G-related services, it necessarily should include the enhanced service capabilities of the original point-to-multipoint wireless distributor: broadcasting.

Please contact the undersigned should you have any questions regarding this matter.

Sincerely,

/s/

Jerald N. Fritz
Executive Vice President,
Strategic and Legal Affairs
ONE Media 3.0, LLC

cc:
Commissioner Michael O'Reilly
Erin McGrath
Will Adams